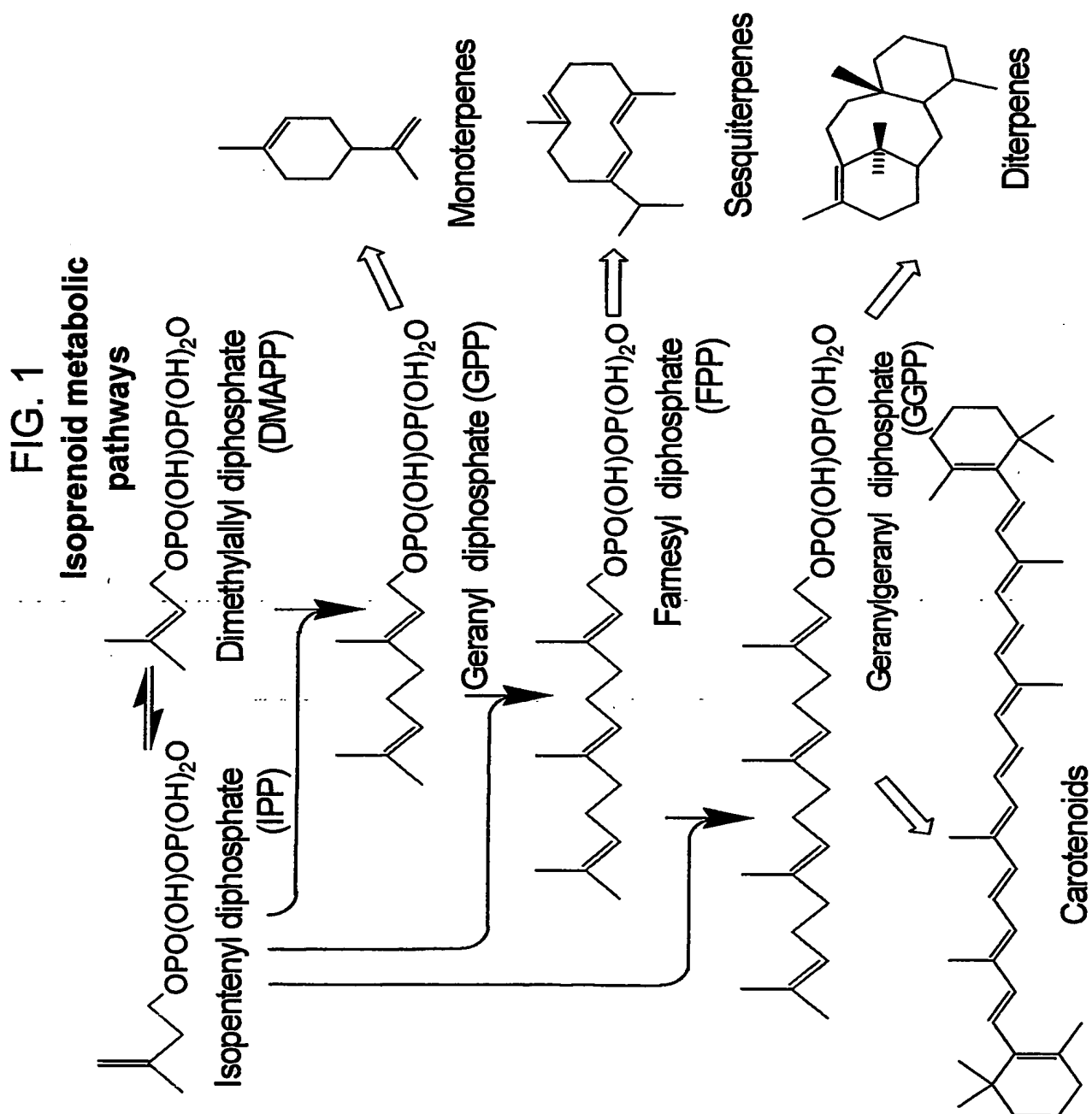


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**FIG. 2**  
**Mevalonate pathway**

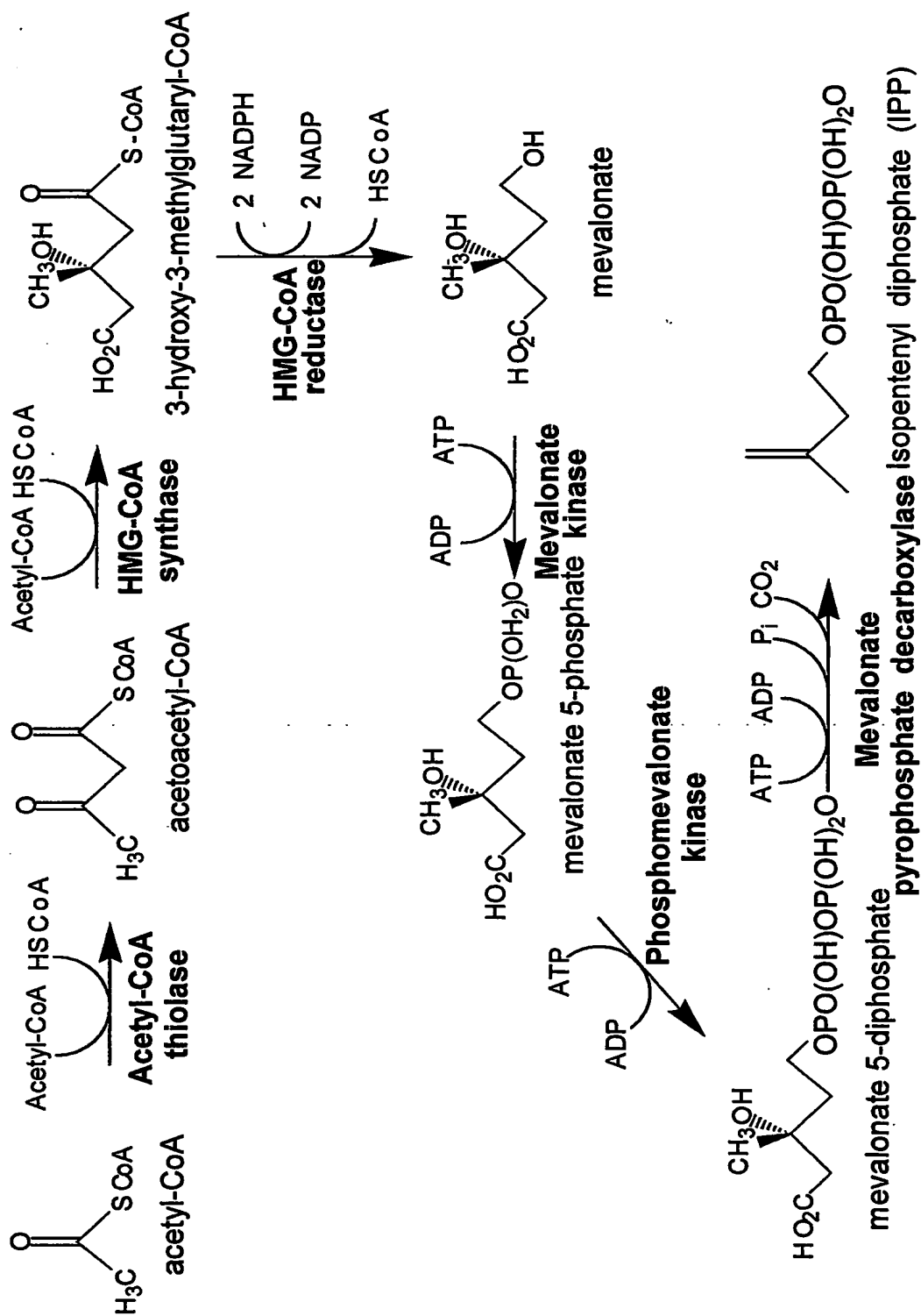
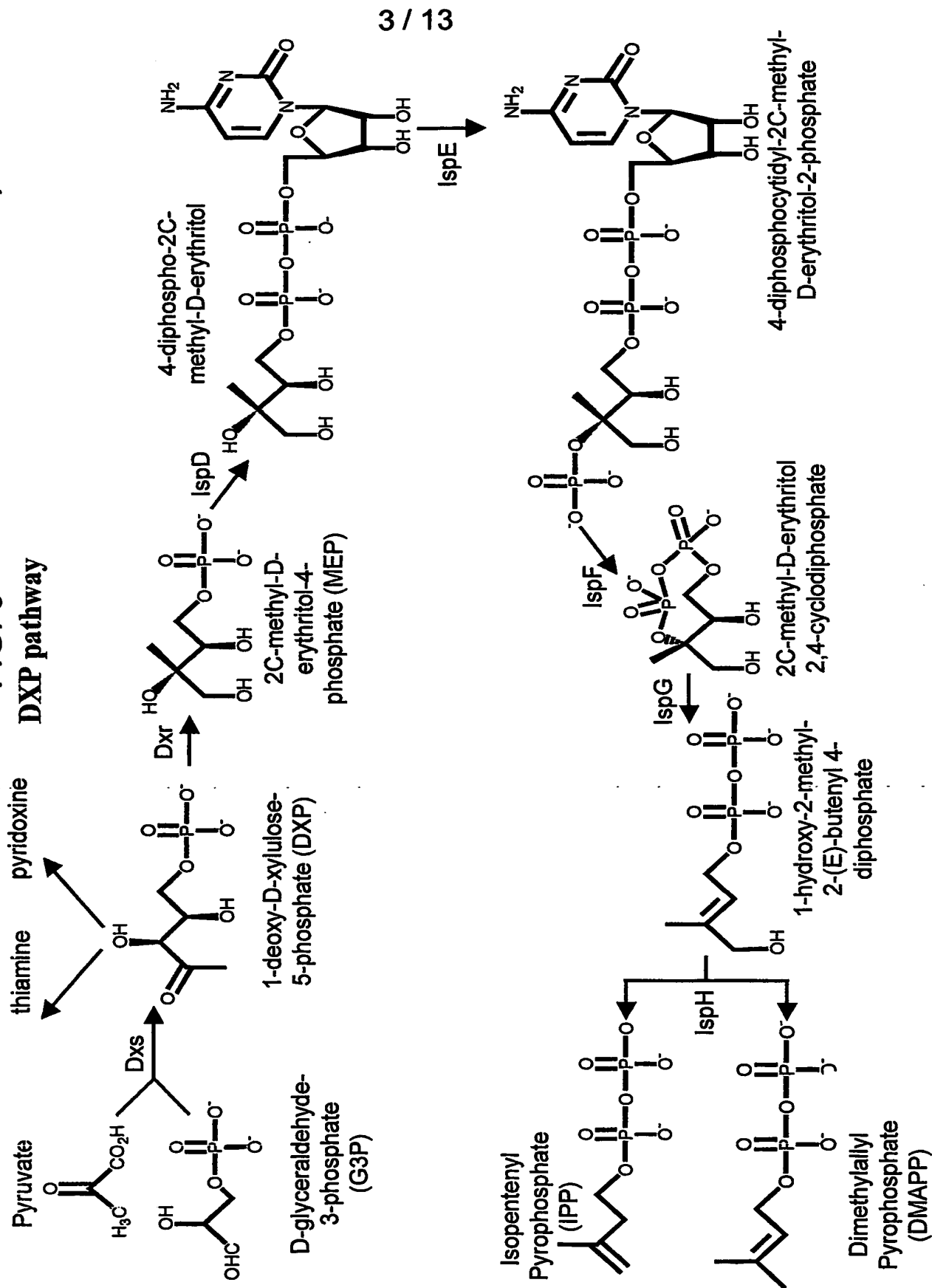


FIG. 3  
DXP pathway



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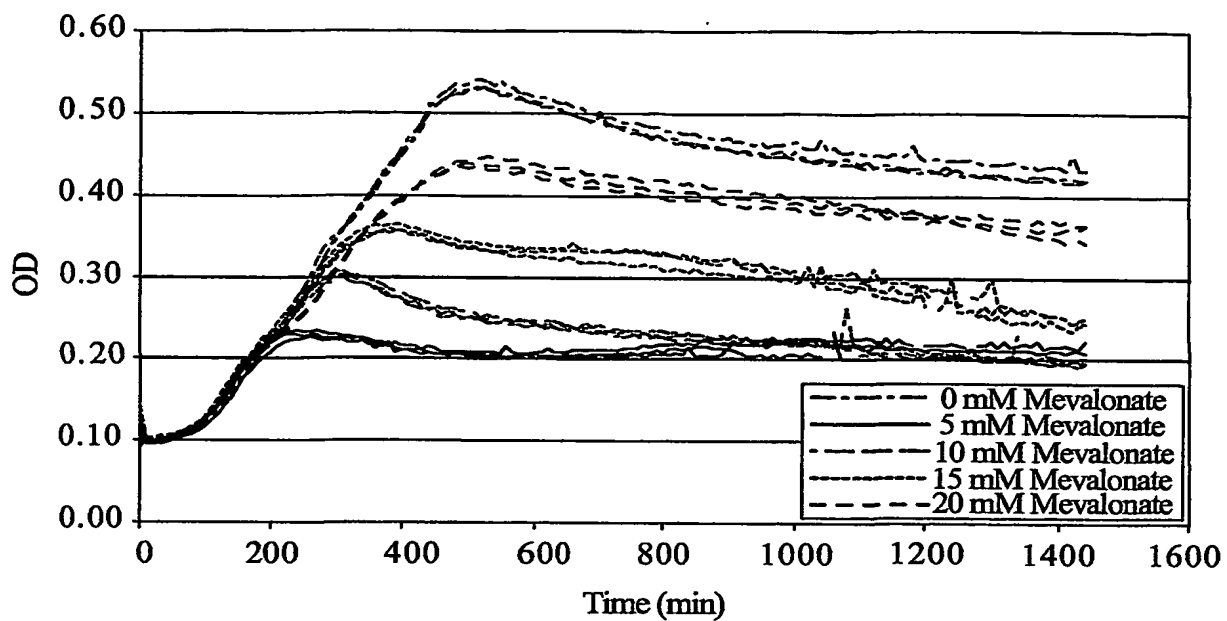


FIG. 4

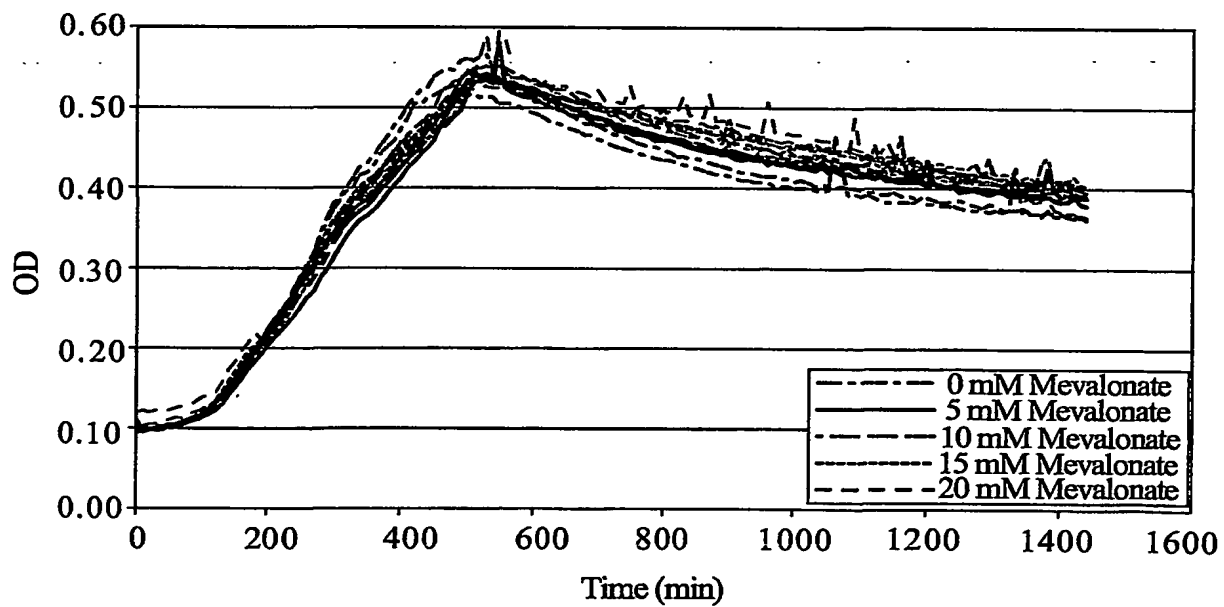
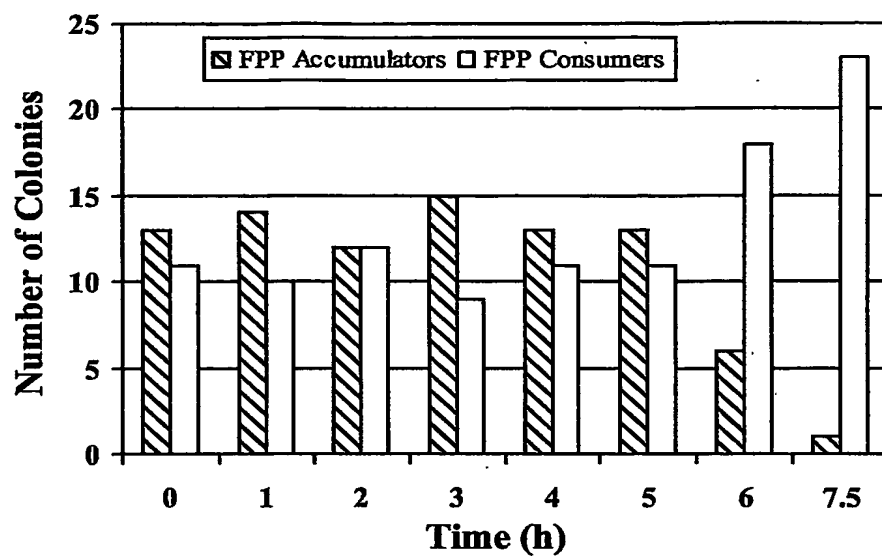


FIG. 5

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FIG. 6



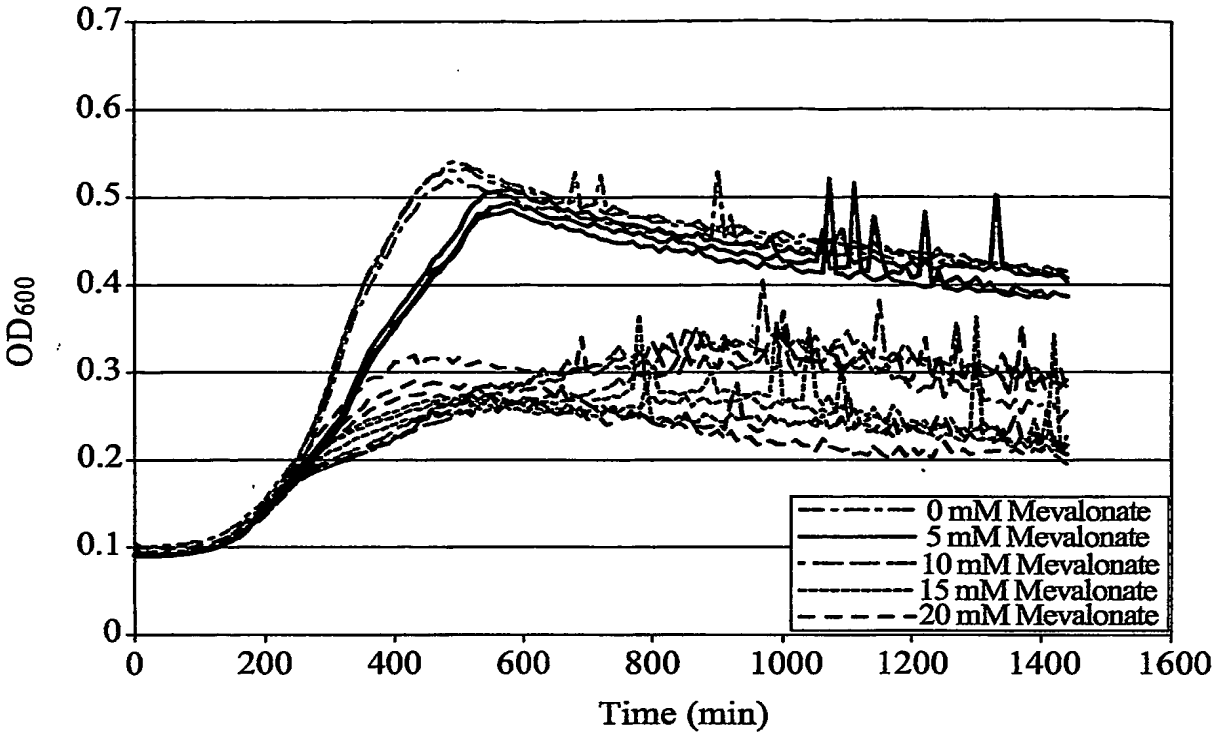


FIG. 7

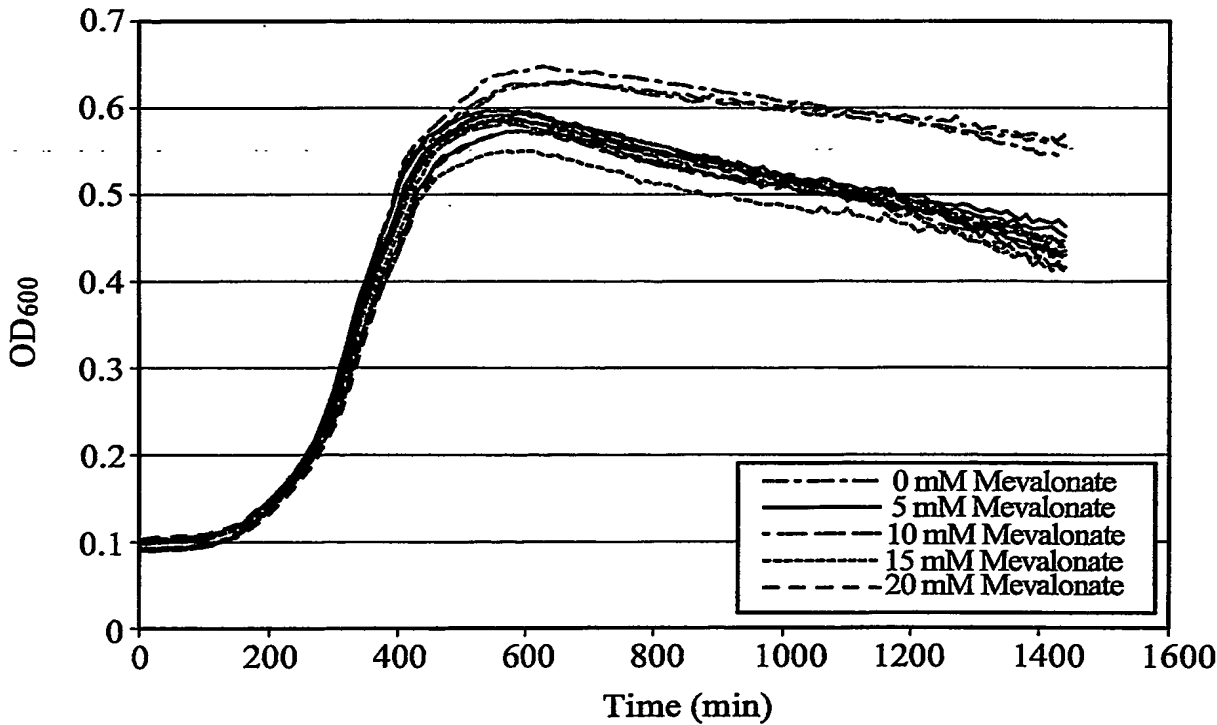


FIG. 8

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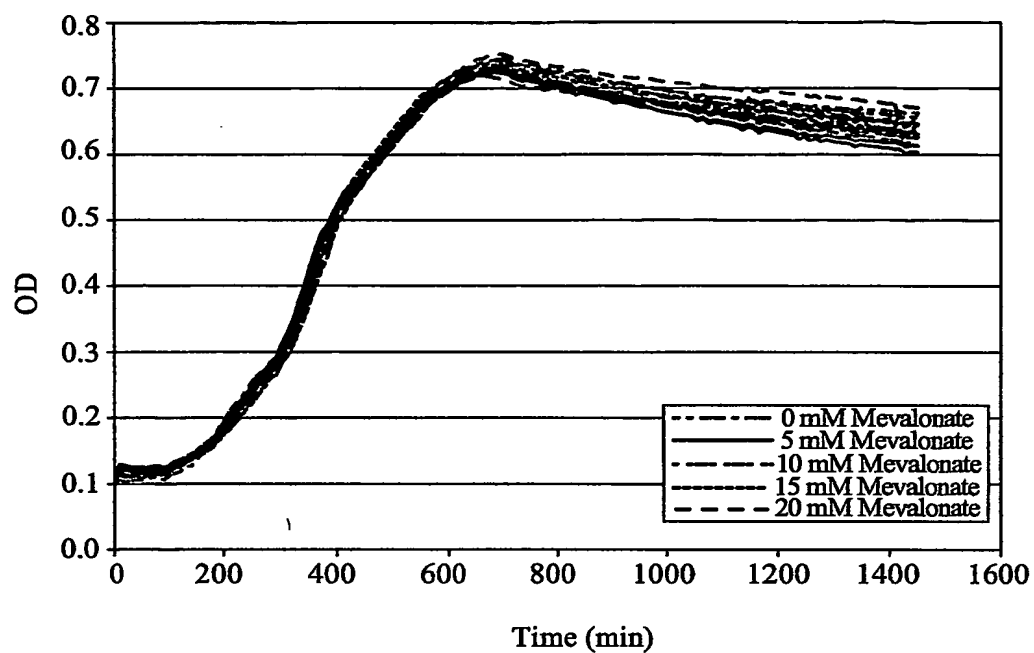
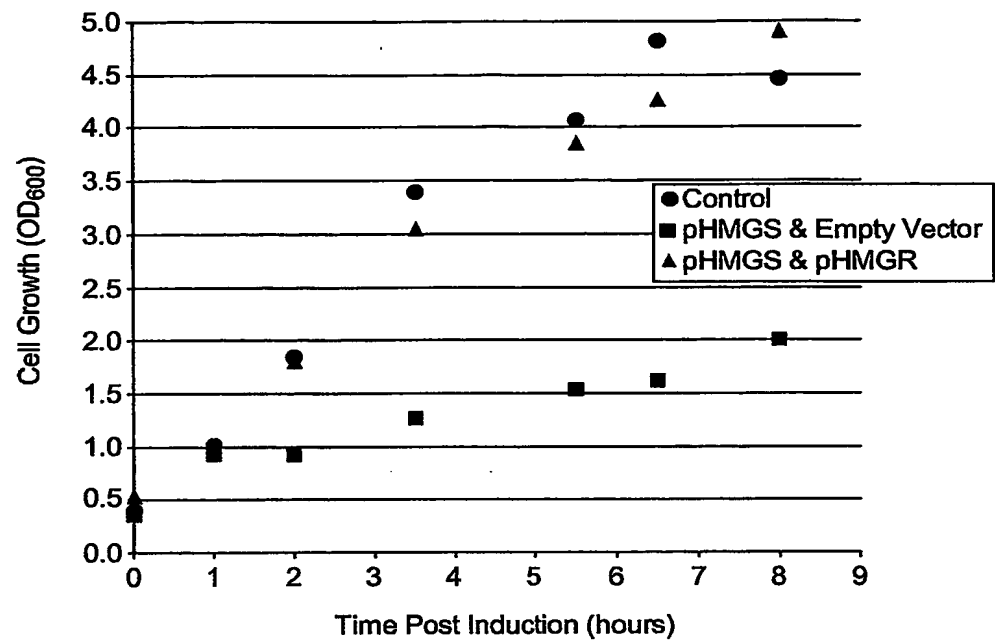


FIG. 9

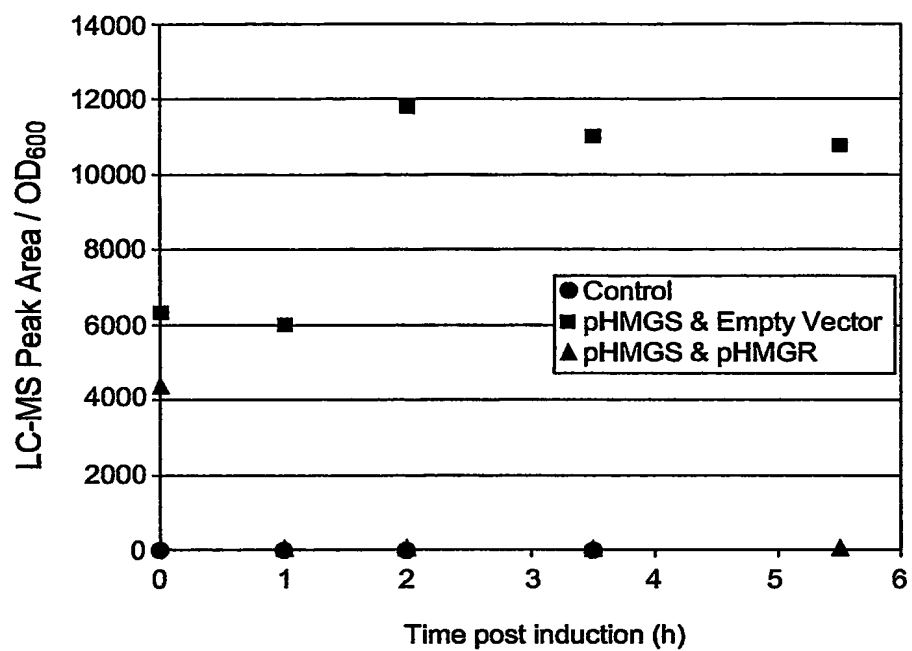
FIG. 10





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FIG. 11



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T-1	
GATTAAGGCATGCACCATGGCCCTGACCGAAGAGAAACCG	ATCCGCCCGATCGCTAACT
CTAATTCCGTACGTGGTACCGGGACTGGCTTCTCTTTGGCTAGGCGGGCTAGCGATTGA	
B-1	B-2
T-2	T-3
TCCCGCCGTCTATCTGGGGTGACCAGTTCCTGATCTACGAAAAGCAGGTTGAGCAGGGT	
AGGGCGGCAGATAGACCCCACTGGTCAAGGACTAGATGCTTTTCGTCCAACCTCGTCCCA	
B-3	
T-4	
GTTGAACAGATCGTAAACGACCTGAAGAAAGAAGTTCGTCAGCTGCTGAAAGAAGCTCT	
CAACTTGTCTAGCATTTGCTGGACTTCTTTCTTCAAGCAGTCGACGACTTTCTTCGAGA	
B-4	B-5
T-5	T-6
GGACATCCCGATGAAACACGCTAACCTGCTGAAACTGATCGACGAGATCCAGCGTCTGG	
CCTGTAGGGCTACTTTGTGCGATTGGACGACTTTGACTAGCTGCTCTAGGTGCGAGACC	
B-6	
T-7	
GTATCCCGTACCACTTCGAACGCGAAATCGACCACGCACTGCAGTGCATCTACGAAACC	
CATAGGGCATGGTGAAGCTTGCGCTTTAGCTGGTGCCTGACGTCACGTAGATGCTTTGG	
B-7	B-8
T-8	T-9
TACGGCGACAACCTGGAACGGCGACCGTTCTTCTCTGTGGTTTCGTCTGATGCGTAAACA	
ATGCCGCTGTTGACCTTGCCGCTGGCAAGAAGAGACACCAAAGCA	GACTACGCATTGT
B-9	
T-10	
GGGCTACTACGTTACCTGTGACGTTTTTAACAACCTACAAGGACAAGAACGGTGCTTTCA	
CCCGATGATGCAATGGACACTGCAAAATTGTTGATGTTCTTCTTGCCACGAAAGT	
B-10	B-11
T-11	T-12
AACAGTCTCTGGCTAACGACGTTGAAGGCTGCTGGAAGTGTACGAAGCGACCTCCATG	
TTGTCAGAGACCGATTGCTGCAACTTCCGGACGACCTTGACATGCTTCGCTGGAGGTAC	
B-12	
T-13	
CGTGTACC	GGGTGAAATCATCCTGGAGGACGCGCTGGGTTTCACCCGTTCTCGTCTGTC
GCACATGGCCCACTTTAGTAGGACCTCTGCGCGACCCAAAGTGGGCAAGAGCAGACAG	
B-13	B-14
T-14	T-15
CATTATGACTAAAGACGCTTTCTCTACTAACCCGGCTCTGTTACCGAAATCCAGCGTG	
GTAATACTGATTTCTGCGAAAGAGATGATTGGGCCGAGACAAGTGGCTTTAGGTGCGAC	

FIG. 12A

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T-16	
CTCTGAAACAGCCGCTGTGGAAACGTCTGCCGCGTATCGAAGCAGCACAGTACATTCCG	
GAGACTTTGTCGGCGACACCTTTGCAGACGSCGCATAGCTTCGTCGTGCATGTAAGGC	
B-16	B-17
T-17	
TTTTACCAGCAGCAGGACTCTCACAACAAGACCCCTGCTGAAACTGGCTAAGCTGGAATT	
AAAATGGTCGTCGTCTTGAGAGTGTTGTTCTGGGACGACTTTGACCGATTGACCTTAA	
B-18	
T-19	
CAACCTGCTGCGAGTCTCTGCACAAAGAAGAACTGTCTCACGTTTGTAAGTGCTGGAAGG	
GTTGGACGACGTCAGAGACGTGTTTCTTCTTGACAGAGTGCAAACATTCACCACCTTCC	
B-19	B-20
T-20	
T-21	
CATTGACATCAAGAAAAACGCGCCGTGCCTGCGTGACCGTATCGTTGAATGTTACTTC	
GTAAACTGTA GTTCTTTTTCGCGGCACGGACGCACTGGCATAGCAACTTCAATGAAG	
B-21	
T-22	
TGGGGTCTGGGTTCTGGTTATGAACCACAGTACTCCCGTGCACGTGTGTTCTTCACTAA	
ACCCAGACCCCAAGACCAATACTTGGTGTCATGAGGGCACGTGCACACAAGAAGTGATT	
B-22	B-23
T-23	
T-24	
AGCTGTAGCTGTTATCACCTGATCGATGACACTTACGATGCTTACGGCACCTACGAAG	
TCGACATCGACAATA GTGGGACTAGCTACTGTGAATGCTACGAATGCCGTGGATGCTTC	
B-24	
T-25	
AACTGAAGATCTTTACTGAAGCTGTAGAACGCTGGTCTATCACTTGCTGGACACTCTG	
TTGACTTCTAGAAATGACTTCGACATCTTGCGACCA GATAGTGAACGGACCTGTGAGAC	
B-25	B-26
T-26	
T-27	
CCGGAGTACATGAAACCGATCTACAACTGTTTCATGGATACCTACACCGAAATGGAGGA	
GGCCTCATGTACTTTGGCTAGATGTTTGACAAGTACCTATGGATGTGGCTTTACCTCT	
B-27	
T-28	
ATTCCTGGCAAAAGAAGGCCGTACCGACCTGTTCAACTGCGGTAAAGAGTTTGTTAAAG	
TAAGGACCGTTTTCTTCGGCATGGCTGGACAAGTTGACGCCATTTCTCAAACAATTTTC	
B-28	B-29
T-29	
AATTCGTACGTAACCTGATGGTTGAAGCTAAATGGGCTAACGAAGGCCATATCCCGACT	
TTAAGCATGCATTGGACTACCAACTTCGATTTACCCGATTGCTTCCGGTATAGGGCTGA	
B-30	
T-30	
T-31	
ACCGAAGAACATGACCCGGTTGTTATCATCACCGGCGGTGCAAACCTGCTGACCACCAC	
TGGCTTCTTGTA CTGGGCCAACAATAGTAGTGGCCGCCACGTTTGGACGACTGGTGGTG	
B-31	

FIG. 12B

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T-32

TTGCTATCTGGGTATGTCCGACATCTTTACCAAGGAATCTGTTGAATGGGCTGTTTCTG	
AACGATAGACCCATACAGGCTGTAGAAATGGTTCCTTAGACAACCTACCCGACAAAGAC	
B-32	B-33
T-33	T-34
CACCGCCGCTGTTCCGTTACTCCGGTATTCTGGGTCGTCTGCTGAACGACCTGATGACC	
GTGGCGGCGACAAGGCAATGAGGCCATAAGACCCAGCAGCAGA	CTTGCTGGACTACTGG

B-34

T-35

CACAAAGCAGAGCAGGAACGTAAACACTCTTCCTCCTCTCTGGAATCTACATGAAGGA	
GTGTTTCGTCTCGTCCTTGCAATTTGTGAGAAGGAGGAGAGACCTTAGGATGTACTTCCT	
B-35	B-36
T-36	T-37
ATATAACGTTAACGAGGAGTACGCACAGACTCTGATCTATAAAGAAGTTGAAGACGTAT	
TATATTGCAATTGCTCCTCATGCGTGTCTGAGACTAGATATTTCTTCAACTTCTGCATA	

B-37

T-38

GGAAAGACATCAACCGTGAATACCTGACTACTAAAAACATCCCGCGCCCGCTGCTGATG	
CCTTTCTGTAGTTGGCACTTATGGACTGATGATTTTTGTAGGGCGCGGGCGACGACTAC	
B-38	B-39
T-39	T-40
GCAGTAATCTACCTGTGCCAGTTCCTGGAAGTACAGTACGCTGGTAAAGATAACTTCAC	
CGTCATTAGATGGACACGGTCAAGGACCTTCATGTCATGCGACCATTCTATTGAAGTG	

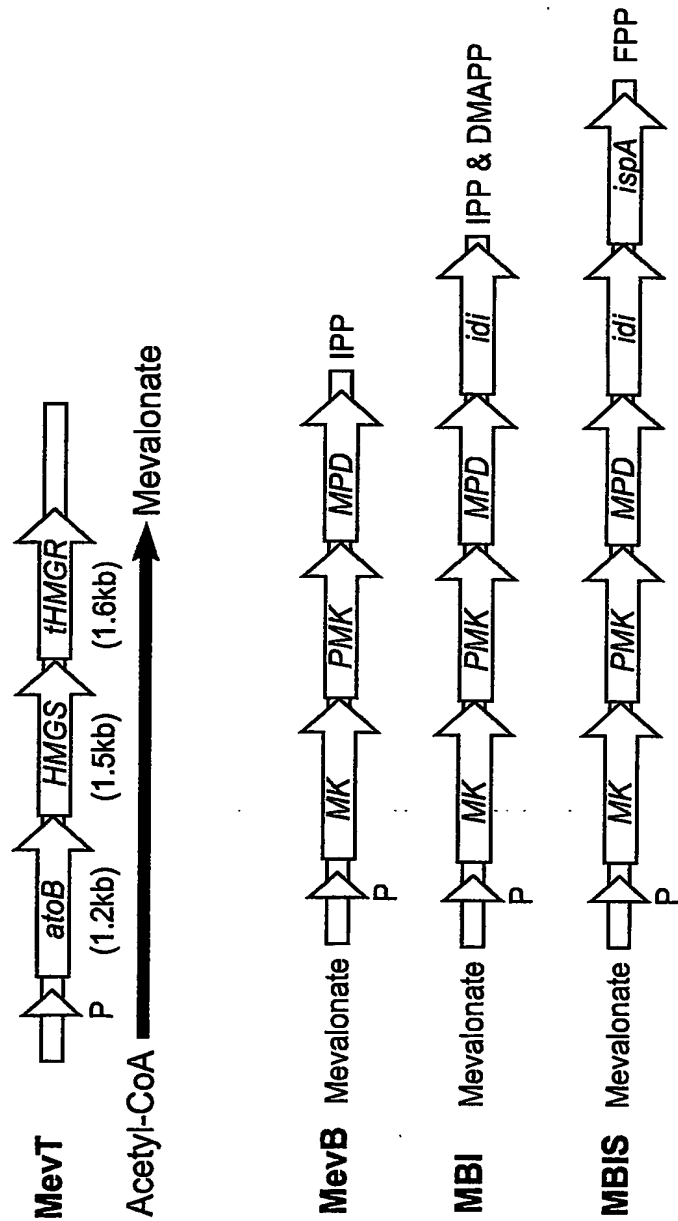
B-40

T-41

TCGCATGGGCGACGAATACAAACACCTGATCAAATCCCTGCTGGTTTACCGATGTCCA	
AGCGTACCCGCTGCTTATGTTTGTGGA	CTAGTTTAGGGACGACCAAATGGGCTACAGGT
B-41	B-stop
T-stop	
TCTGATCCCGGGATTAGAT	SEQ ID NO: 23
AGACTAGGGCCCTAATCTA	SEQ ID NO: 24

FIG. 12C

FIG. 13



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